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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SIMB-M02

Intel® Atom™ Mini-ITX with
VGA/LVDS/HDMI, 6 COMs and LAN



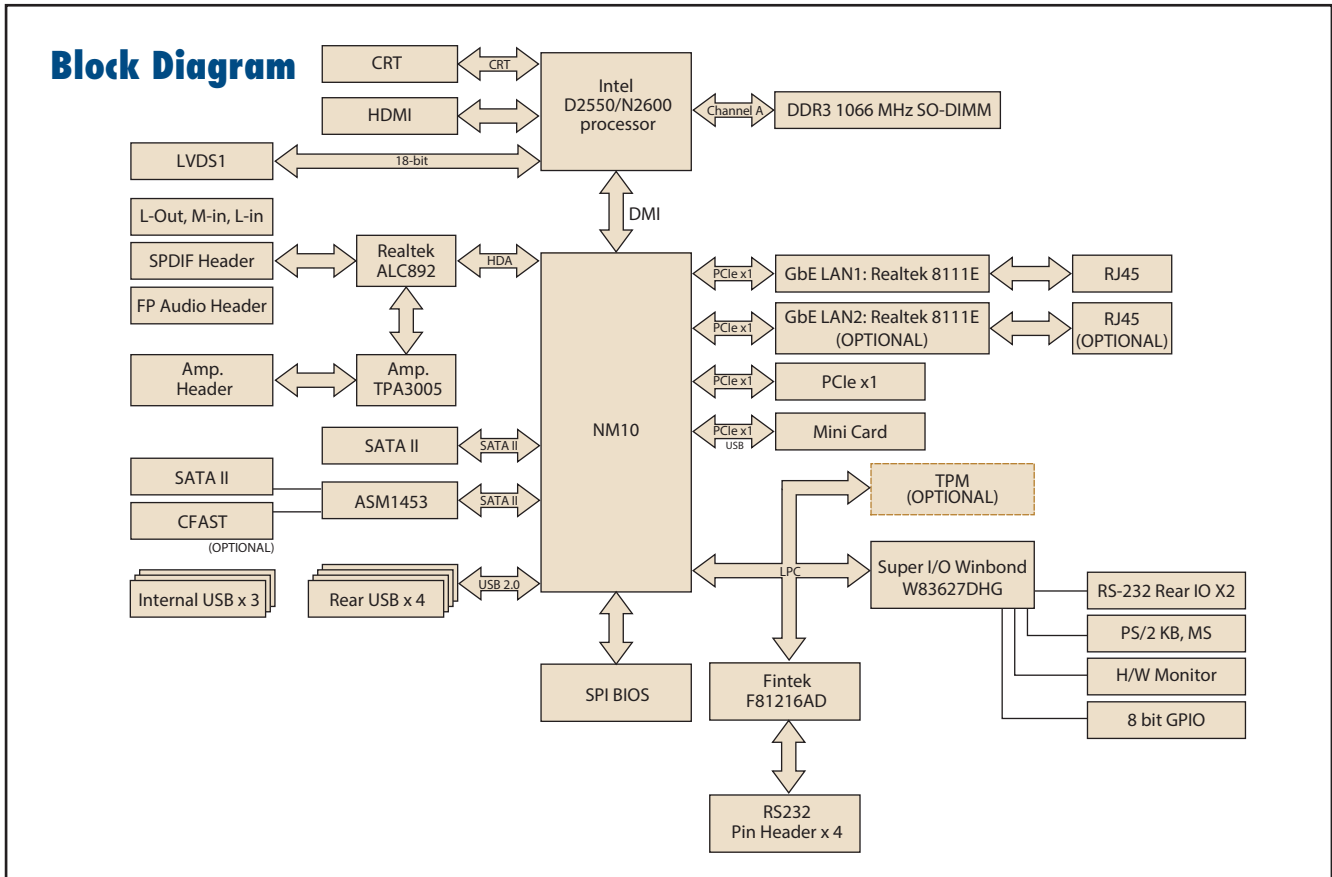
N2600 series only

Features

- Supports Intel® N2600 / D2550 processor
- Supports Intel NM10 chipset
- One 204-pin SO-DIMM up to 4 GB DDR3 1066 MHz SDRAM
- Realtek 8111E LAN
- Supports multiple dual display functions : VGA, HDMI, Single channel 18-bit LVDS
- 1 x PCIe x 1, 1 x Full Size Mini-PCIe, 1 x CFast (Optional)
- 6 COM (with power), 2 SATA II
- 7 USB 2.0, TPM 1.2 (Optional)

Specifications

Processor System	CPU	Intel Atom N2600	Intel Atom D2550
	Max. Speed	1.6 GHz (Dual core)	1.86 GHz (Dual core)
	L2 Cache	1 MB	1 MB
	Chipset	Intel NM10	
	BIOS	AMI 16 Mbit, SPI	
Expansion Slots	PCIe	1	
	Full Size Mini-PCIe	1	
Memory	Technology	Single channel DDR3 1066 MHz	
	Max. Capacity	2 GB (for N2600), 4 GB (for D2550)	
	Socket	1 x 204-pin SO-DIMM (Non-ECC)	
Graphics	Controller	Embedded Gen3.5+ GFX Core, 400/640 MHz render clock frequency for N2600/D2550	
	VGA	Supports max. resolution 1920 x 1200	
	LVDS	Single channel 18-bit LVDS up to 1366 x 768	
	HDMI	HDMI 1.3 supports max resolution 1920 x 1200	
	Dual Display	VGA + LVDS, VGA + HDMI, LVDS + HDMI	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	Realtek 8111E LAN	
	Connector	RJ-45 x 1	
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)	
	Channel	2	
SSD	Cfast	Optional (co-lay with SATA II, if it is used, only 1 SATA II can be used)	
Rear I/O	VGA	1	
	HDMI	1	
	Ethernet	1	
	USB	4 (USB 2.0)	
	Audio	3 (Line-out, Line-in, Mic-in)	
	Serial	2 (RS-232 with R1/5V/12V power)	
	PS/2	1 port (supports Y cable)	
Internal Connectors	LVDS & Inverter	1	
	USB	3 (USB 2.0)	
	Serial	4 (RS-232 with R1/5V/12V power)	
	SATA	2 (SATA 2.0)	
	GPIO	8-bit (4-bit DI and 4-bit DO)	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1~ 255 sec/min	
Security	TPM	Optional	
Power Requirements	Power Type	Single Voltage 12V DC input by 1 x External DC Jack / 1 x Internal 2x2-pin Power Connector	
	Typical Power Consumption	Windows IDOL: 24.72 W (Intel N2600 1.6 GHz processor/DDR3 1333 MHz 4 GB)	
Environment	Temperature	Operating	Non-Operating
		0 ~ 50° C (32 ~ 122° F)	-20 ~ 70° C (-4 ~ 158° F)
Physical Characteristics	Dimensions	170 x 170 mm (6.69" x 6.69")	



Ordering Information

P/N	CPU	Chipset	VGA	GbE	USB	COM	SATA
SIMB-M02-N2600A1E	N2600	NM10	1	1	7 (4 Rear, 3 Internal)	6 x RS-232 (2 Rear, 4 Internal)	2 SATA II
SIMB-M02-D2500A1E	D2550	NM10	1	1	7 (4 Rear, 3 Internal)	6 x RS-232 (2 Rear, 4 Internal)	2 SATA II

Note: Minimum order quantity is 10 pieces

Packing List

Description	Quantity
SATA cable kit (SATA/POWER)	1
I/O shield	1
CPU Cooler	1 (D2550 only)
CPU Heatsink	1 (N2600 only)
Startup manual	1 (per 10 units)
Driver CD	1 (per 10 units)

Embedded OS/API

OS/API	Part number	Description
XPE	2070011396	XPE WES2009 SIMB-M02
WES7E	2070011561	WES7E SIMB-M02
WES7P	2070012094	WES7P SIMB-M02

I/O View



SIMB-M02-D2500A1E
SIMB-M02-N2600A1E

Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with two ports, 30.5 cm
SIMB-0ADP-90W1E	Power Adapter 90W DC12V /7.5A
1702002600-01	Power Cord 3P 180cm, USA type (For power adapter SIMB-0ADP-90W1E)
1700018705	Power Cord 3P 180cm, Europe type (For power adapter SIMB-0ADP-90W1E)
1700018704	Power Cord 3P 180cm, UK type (For power adapter SIMB-0ADP-90W1E)
1700000237-01	Power Cord 3P 180cm, PSE type (For power adapter SIMB-0ADP-90W1E)
1700000596	Power Cord 3P 180cm, CCC type (For power adapter SIMB-0ADP-90W1E)
1700001714	Power Cord 3P 180cm, BSMI type (For power adapter SIMB-0ADP-90W1E)
1700019549	COM port cable with bracket, 40cm
1700021716-01	COM port cable w/o bracket, 10cm

Warning: It is highly recommended to purchase SIMB-0ADP-90W1E with the board, as its power PIN definition is customised to meet this board requirement.

Optional Chassis

Part Number	Description
AIMB-B2000-00YE	Mini-ITX chassis with optional DC Adaptor